

Initial Sampling Data

Bottom Sample @ 3"

	CI-	PID	GRO	DRO
1	656	3.4		
2	944	12		
3	48	1	10.5	<10

Vertical 1

Depth	CI-	PID	GRO	DRO
SS	5628	2.8		
6"	3836	3		
1'	604	1.4		
1.5'	1853	1		
2'	363	0.5		
2.5'	2315	0		
3'	833	0		
4'	662	0.8		
5'	256	1.5	<10	<10
6'	80	1	<10	13.8

PT 1

VERT 1

PT 2

PT 3

Landowner: COG Operating
DGW: None

GPS CENTER STAIN: 32.794722 -104.136768

CI- LAB DATA
CI- FIELD DATA

Legend

- ▲ SAMPLE POINT
- VERTICAL
- STAIN - 3,491 SQ FT



APACHE
D STATE #49

UL E SECTION 36
T-17-S R-28-E
EDDY COUNTY, NM



0 25 50
Feet

GPS date: 3/25/15 KH
Drawing date: 3/26/15
Drafted by: T. Grieco



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

April 27, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: D STATE #49 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/23/15 8:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

APACHE CORP - HOBBS
BRUCE BAKER
2350 W. MARLAND BLVD.
HOBBS NM, 88240
Fax To: (575) 393-2432

Received:	04/23/2015	Sampling Date:	04/22/2015
Reported:	04/27/2015	Sampling Type:	Soil
Project Name:	D STATE #49 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT 3 @ 3" (H501048-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/23/2015	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	10.5	10.0	04/23/2015	ND	208	104	200	0.0576	
DRO >C10-C28	<10.0	10.0	04/23/2015	ND	222	111	200	1.11	

Surrogate: 1-Chlorooctane 106 % 47.2-157

Surrogate: 1-Chlorooctadecane 100 % 52.1-176

Sample ID: VERITCAL 1 @ 5' (H501048-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	04/23/2015	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/23/2015	ND	208	104	200	0.0576	
DRO >C10-C28	<10.0	10.0	04/23/2015	ND	222	111	200	1.11	

Surrogate: 1-Chlorooctane 106 % 47.2-157

Surrogate: 1-Chlorooctadecane 104 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:APACHE CORP - HOBBS
BRUCE BAKER
2350 W. MARLAND BLVD.
HOBBS NM, 88240
Fax To: (575) 393-2432Received: 04/23/2015
Reported: 04/27/2015
Project Name: D STATE #49 BATTERY
Project Number: NONE GIVEN
Project Location: NOT GIVENSampling Date: 04/22/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson**Sample ID: VERTICAL 1 @ 6' (H501048-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	04/23/2015	ND	416	104	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/23/2015	ND	208	104	200	0.0576	
DRO >C10-C28	13.8	10.0	04/23/2015	ND	222	111	200	1.11	
Surrogate: 1-Chlorooctane	107 %	47.2-157							
Surrogate: 1-Chlorooctadecane	100 %	52.1-176							

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>APCND</u>				BILL TO												ANALYSIS REQUEST											
Project Manager: <u>BILCO BAKER</u>				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>Chlorides</div> <div>TPH 8015 M</div> <div>BTEX</div> <div>Texas TPH</div> <div>Complete Cations/Anions</div> <div>TDS</div> </div>																			
Address:				Company:																							
City: Hobbs State: NM Zip: 88240				Attn:																							
Phone #: Fax #:				Address:																							
Project #: Project Owner:				City:																							
Project Name:				State: Zip:																							
Project Location: <u>D State #49 Battery</u>				Phone #:																							
Sampler Name:				Fax #:																							
FOR LAB USE ONLY																											
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX				PRESERV.		SAMPLING													
								GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:				ACID/BASE: ICE / COOL OTHER:		DATE TIME													
<u>H5001048</u>																											
<u>1</u>		<u>Pt 3 @ 3 inches</u>		<u>6</u>		<u>1</u>								<u>4-22-15</u> <u>10:00</u>		<u>✓</u> <u>✓</u>											
<u>2</u>		<u>Vert 1 @ 5 ft.</u>		<u>6</u>		<u>1</u>								<u>4-22-15</u> <u>3:30</u>		<u>✓</u> <u>✓</u>											
<u>3</u>		<u>Vert 1 @ 6 ft.</u>		<u>6</u>		<u>1</u>								<u>4-22-15</u> <u>3:35</u>		<u>-</u> <u>✓</u>											

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>RAP</u>		Date: <u>4/23/15</u>		Received By: <u>Jodi Henson</u>		Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Add'l Phone #:	
		Time: <u>8:30</u>				Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS:			
		Time:				email: hconder@riceswd.com; lflores@rice-ecs.com; lweinheimer@rice-ecs.com; knorman@rice-ecs.com; jkamplain@rice-ecs.com; sedwards@rice-ecs.com; cursanic@rice-ecs.com Environmental Tech: <u>K Humphrey</u> @rice-ecs.com			
Delivered By: (Circle One)				Sample Condition		CHECKED BY:			
Sampler - UPS - Bus - Other:				Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		(Initials) <u>JA</u>			

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#54

Apache D State 49

Unit Letter E, Section 36, T17S, R28E



Initial release area, facing southwest 3/25/15



Initial release area, facing west 3/25/15



Initial release area, facing north 3/25/15



Shoveling release area, facing west 4/22/15

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 27 2015
RECEIVED

Form C-141
Revised August 8, 2011

Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR ☒ Initial Report ☐ Final Report

Name of Company: Apache Corporation **873** **Contact:** Bruce Baker
Address: 2350 W Marland Blvd Hobbs, NM 88240 **Telephone No.:** (432) 631-6982
Facility Name: D State 49 Battery **Facility Type:** Battery

Surface Owner COG: **Mineral Owner State:** **API No.:** 30-015-38413

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	36	17S	28E	1730'	FNL	330'	FWL	Eddy

Latitude N32.794722 Longitude W104.136778

NATURE OF RELEASE

Type of Release: produced water	Volume of Release: 35 barrels of water	Volume Recovered: 30 barrels of water
Source of Release: check valve	Date and Hour of Occurrence: 3/24/2015	Date and Hour of Discovery: 3/24/2015
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher	
By Whom? Bruce Baker	Date and Hour: 3/25/2015	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A 1/8 inch plug blew out of the side of a 2 inch check valve on discharge water pump. The transfer pump was shut down and check valve replaced. Vacuum trucks were dispatched to pick-up fluid.

Describe Area Affected and Cleanup Action Taken.*

The entire release was contained on the lease pad. The area was mapped and initial field samples collected.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION	
Signature: <u>Bruce Baker</u>	Approved by Environmental Specialist: <u>[Signature]</u>
Printed Name: Bruce Baker	Approval Date: <u>3/31/15</u> Expiration Date: <u>N/A</u>
Title: Environmental Technician	Conditions of Approval:
E-mail Address: <u>farry.baker@apachecorp.com</u>	Remediation per O.C.D. Rules & Guidelines
Date: <u>3/27/2015</u> Phone: <u>(432) 631-6982</u>	Attached <input type="checkbox"/>

SUBMIT REMEDIATION PROPOSAL NO
LATER THAN: 4/30/15

* Attach Additional Sheets If Necessary

2RP-2924

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Apache Corporation	Contact	Bruce Baker
Address	2350 W. Marland Blvd, Hobbs, NM 88240	Telephone No.	(432) 631-6982
Facility Name	D State 49 Battery	Facility Type	Battery
Surface Owner	COG	Mineral Owner	State
		API No.	30-015-38413

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	36	17E	28E	1730'	FNL	330'	FWL	Eddy

Latitude N32.794722 Longitude W104.136778

NATURE OF RELEASE

Type of Release	produced water	Volume of Release	35 barrels of water	Volume Recovered	30 barrels of water
Source of Release	check valve	Date and Hour of Occurrence	3/24/2015	Date and Hour of Discovery	3/24/2015
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher		
By Whom?	Bruce Baker	Date and Hour	3/25/2015		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

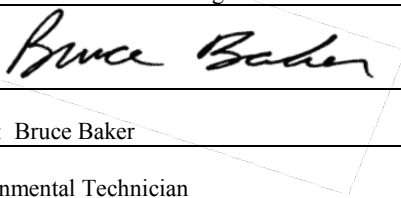
If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A 1/8 inch plug blew out of the side of a 2 inch check valve on discharge water pump. The transfer pump was shut down and check valve was replaced. Vacuum trucks were dispatched to pick up fluid.

Describe Area Affected and Cleanup Action Taken.* The release covered 3,491 square feet of lease pad. Apache hand shoveled the released to 3 inches bgs to remove the highly wet material. On March 25th, 2015, RECS personnel were on site to sample three points at the surface of the release. Of the three points, only Pt 3 showed field concentrations below regulatory standards. This sample was taken to a commercial laboratory for analysis and returned a chloride reading of 48 mg/kg. To fully delineate the release, a vertical was installed in the center of the stain. The vertical was installed to a depth of 6 ft, and samples were field tested for chlorides and organic vapors. The bottom two samples were taken to a commercial laboratory for analyses and returned chloride values of 256 mg/kg at 5 ft bgs and 80 mg/kg at 6 ft bgs. Given the number of lines and facility apparatus going through the release area, Apache will address the release during facility abandonment.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Bruce Baker	Approved by Environmental Specialist:		
Title: Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: larry.baker@apachecorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 5/15/15	Phone: (432) 631-6982		

* Attach Additional Sheets If Necessary